GOVERNMENT OF INDIA
WATER RESOURCES
LOK SABHA

STARRED QUESTION NO:308
ANSWERED ON:11.08.2003
RECHARGING OF GROUND WATER
A. VENKATESH NAIK;RAM TAHAL CHOUDHARY

Will the Minister of WATER RESOURCES be pleased to state:

(a) whether any proposals/schemes from some State Governments to recharge ground water have been received by the Union Government during the current year;

(b) if so, the details thereof, State-wise;

(c) whether various schemes relating to recharging of ground water being implemented in the country have not achieved their targets so far;

(d) if so, the reasons therefor;

(e) the targets set and achievements made under each scheme during the last three years, year-wise; and

(f) the extent to which water level has risen during the above period, State-wise?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRIMATI BIJOYA CHAKRAVARTY)

(a) to (f) A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY OF PARTS (a) TO (f) OF LOK SABHA STARRED QUESTION NO.308 FOR REPLY ON 11.08.2003 REGARDING RECHARGING OF GROUND WATER

(a)&(b) The Ministry of Water Resources have not received any proposals/schemes to recharge ground water from State Governments during the current financial year, 2003-04.

(c)to(e) Water being a State subject, it is primarily the responsibility of the concerned State Governments to plan, finance and execute schemes for recharging ground water. However, with a view to demonstrate the efficacy of recharge structures in various hydrogeological situations in the country, the Central Ground Water Board (CGWB), under the Ministry of Water Resources has taken up a Central Sector Scheme on 'Study of Recharge to Ground Water' during the IX Five Year Plan. A total number of 174 projects approved for implementation in 27 States/Union Territories at a cost of Rs. 35.81 crore under the scheme are being implemented as per targets. These projects cover small areas and have shown localized positive impact on ground water regime. The number of projects completed under the CGWB's above said scheme during the last three years are as under:-

Sl. No.	Year	Number of projects completed
1	2001-02	24
2	2002-03	63
3	2003-04 (upto June, 2003)	03

(f) The impact assessment, done by the CGWB for few completed projects is given in the enclosed Annexure.

ANNEXURE

(REFERENCE LOK SABHA STARRED QUESTION NO.*308 FOR REPLY ON 11.08.2003)

IMPACT ASSESSMENT OF ARTIFICIAL RECHARGE PROJECTS IMPLEMENTED BY CENTRAL GROUND WATER BOARD

Name of the State	Name of the Scheme	Type of the Scheme	Results
Haryana	Roof rain harvesting	Top/Pavement water system	Roof top rain water harvesting system	2370 cubic meters rainwater recharged in one rainy season.

	at DC Office, Faridabad		
Karnataka	Rainwater harvesting in Mulbagul and Gauribidnaur talukas, Kolar district.	Check Dam, Watershed treatment, Gravity Recharge Wells.	Sustainability of ground water structures increased by 2 to 3 times. Crop Intensity increased by 2 to 3 times.
Madhya Pradesh	Construction of Sub-Surface Dykes at Dhobighat and Chhintaharan in Utawali Watershed, Block Burhanpur, District Khandwa.	Sub-surface dykes	Rise in ground water levels in upstream area has been observed. The surface flow in the down stream of the river is reduced.
	Artificial recharge studies in Khargone district.	Sub-surface dykes	Rise in ground water level reflected by increase of command area of dugwells in the vicinity of these dykes has been observed. The surface flow in the river has been reduced substantially.
	Artificial recharge studies in Londhri Watershed, village Narayana, Dewas district	Sub-surface dykes Check Dam	Rise in water level in existing tubewells in upstream area by 0.30 to 2.00 m has been observed.
	Artificial recharge studies in Barwa Kalan, Rajgarh district	Sub-surface dyke	Rise in water level in dugwells in the range of 0.80-3.80 m and 6-12m in handpumps has been observed.
	Artficial recharge from Percolation tanks at Sukhedi, Mandsaur district	Percolation tank	Water level rise of 1-4 metres in the command area downstream of tank has been observed.
	Roof top rain water harvesting in Dewas city	Roof top rain water harvesting through 1000 buildings	Peoples participation was demonstrated through this scheme where only on-line filter was supplied free of cost and other arrangement of roof top rain water harvesting was done by beneficiaries. Increase in yield of tubewells and improvement in ground water resource was recorded despite deficit rainfall.
	Construction of sub-surface dyke at Walmi farm	Sub-surface dyke	The demonstration farm recorded availability of ground water after drying up of surface water pond. The average rate depletion of ground water level has reduced from 10cm/day to 6cm/day.
Maharashtra	Artificial Recharge in Besaltic terrain, Warud Taluka, Amravati district.	Percolation tanks, Check Dams.	Benefited area - About 60 to 120 ha. per Percolation Tank, 3 to 15 hectare per Check Dam Water level rise - Upto 1.5 m.
	Mountain Front Recharge of alluvial aquifers, Yaval Taluka, Jalgaon district.	Percolation tanks, Recharge Shaft, Dugwells.	Benefitted area - upto 5 Sqkm. Benefited area-400 hectare Water level rise-1 to 5 m
	Roof Top Rainwater harvesting, KITS, Remtek, Nagpur district.	Rooftop Rainwater harvesting.	90% of harvested rain water is recharged. Water level rise and increase in discharge in nearby wells has been observed.
NCT, Delhi	Artificial Recharge in JNU & IIT	Check Dams	Water levels have risen upto 2.55 m in the vicinity of Check Dams and area benefitted is upto 30 hectare from each check dam.

	Roof Top Rain Water Harvesting in IIT	Roof Top rain harvesting system.	787 cubic metre rain water recharged. Rise in water levels 0.12 to 0.78 m.
	Roof Top/Pavement rainwater harvesting system at President's Estate	Roof Top/Pavement Rain Water Harvesting System through existing dugwell, recharge shaft , recharge well.	Water level rise - 0.94 to 2.32 meters
	Roof Top/Pavement rainwater harvesting at Shram Shakti Bhawan.	Roof Top/Pavement Rain Water Harvesting System.	3000 cubic meter rain water recharged in one rainy season. Water level rise - 1.42 to 2.17 meters.
	Pavement rain water harvesting at Lodhi Garden.	Pavement Rain Water Harvesting System.	Water level rise 0 0.67 to 0.72 meters.
Punjab	Artificial Recharge in alluvial aquifers from Dhuri Link Drain, District Sangrur	Lateral shaft injection wells. Vertical shafts	Recharge @ upto 16.51 lps and rise in ground water levels upto 1.38 meter in the vicinity of Lateral shaft.
	Artificial Recharge from village pond in Issui village, Ludhiana	Recharge shaft with injection well.	Recharge @ of 10 lps
	Roof Top Rain Water Harvesting at Kheti Bhawan, Amritsar	Roof Top Water harvesting system	210 cubic meter of rainfall was recharged.
Rajasthan	Artificial Recharge in Mainpura, Jhunjhunu district.	Check dam cum sub-surface barrier	Rainwater harvesting - 88000 cu.m. Water level rise - 0.65 m.
	Roof Top Rain Water harvesting at Chief Minister's residence.	Roof top rain water harvesting system	725 cubic meter water recharged in one rainy season.
	Roof Top Rain Water Harvesting System at Raj Bhawan, Jaipur.	Roof top rain water harvesting system	490 cubic meter rain water recharged in one rainy season.
	Roof Top Pavement Rain Water Harvesting System at Rajasthan High Court, Jaipur	Roof top rain water harvesting system	1106 cubic meter rain water recharged in one rainy season.
	Roof Top Pavement Rain Water Harvesting at Vitta Bhawan, Jaipur.	Roof top rain water harvesting system	1106 cubic meter of rain water recharged in one rainy season
	Roof Top rain water harvesting at MREC, Jaipur.	Roof top rain water harvesting system	1640 cubic meter of rain water recharged in one rainy season.
	Roof Top Pavement rain water harvesting at CGWB Office building, Jaipur	Roof top rain water harvesting system	350 cubic meter of rainwater recharged in one rainy season.
	Roof Top rainwater harvesting at GWD Office building, Jaipur.	Roof top rain water harvesting system	321 cubic meter of rainwater recharged in one rainy season.
	Roof Top/Pavement Rain water harvesting at State Secretariat building (Part I&II), Jaipur.	Roof top rain water harvesting system	2320 cubic meter of rainwater recharged in one rainy season.
West Bengal	Artificial Recharge Project - Purulia district	Farm Ponds, Nala bunds, sub-surface dykes	Water level rise - 0.15 m.